



# SPILL PREVENTION AND RESPONSE PLAN

# Lakeside Industries Front Street, Portland Site

Asphalt Plant Operated By: Lakeside Industries

DEQ Site ID #: 26-3242 General Permit

Site Address: 4850 NW Front St. Portland, OR 97210

Mailing Address: P.O. Box 7016 Issaquah, WA 98027

# **Contact Persons:**

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Pat Dunnigan, Site/Plant/Operator 503-841-4941

Forest Lane, Environmental Program Director (Corporate Headquarters)

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#### INTRODUCTION

Lakeside Industries owns and operates a hot-mix asphalt plant at 4850 Front Ave, Portland, Oregon. Lakeside Industries portion of the site consists of approximately 9.4 acres. Raw materials (crushed aggregate and recycled asphalt paving) are bought to the conveyor belt from a barge in the Willamette River and stored in outside stockpiles. The facilities consist of:

- 1) Asphalt plant; comprised of aggregate feed bins, dryer/drum mixer, baghouse, storage silo and truck loading hopper, and associated conveyor belts and piping.
- 2) Storage tanks for liquid asphalt cement and truck-bed release agent.
- 3) Stockpiles of raw materials, including various types and sizes of aggregate and recycled asphalt paving (RAP).

#### DESCRIPTION OF ASPHALT CONCRETE MANUFACTURING PROCESS

- 1) Aggregate is loaded from a stockpile into aggregate feeders. From here it drops onto a conveyor belt and is weighed before it feeds into the dryer/drum mixer.
- 2) The dryer/drum mixer tumbles the aggregate in the presence of a burner flame that dries and heats the rock in preparation to mixing with asphalt cement.
- 3) At the end of the dryer, the asphalt cement is mixed in and the resulting mixture is dropped into a drag conveyer to be raised into the surge bin for loading into trucks.
- 4) The exhaust stream contains moisture and dust from the heating/drying process. It is pulled from the dryer/drum mixer by a strong fan into the bag house, where it is passed through a series of long narrow filter bags to remove the dust. The remaining exhaust is simply hot, moist air and exits the bag house as a plume of steam. The steam plume is visible on cool mornings and may not be visible later when the air temperature is warmer. The dust is removed to a storage area where it is mixed with water to keep it from blowing around. It is either returned to the hot mix or used as a reclamation soil supplement.

# **DEFINITION OF TERMS**

Hot-mix Asphalt Concrete is a physical mixture of about 95% aggregate and 5% asphalt cement. Asphalt concrete is produced, transported and laid down while is it still hot. It must be compacted while hot in order to achieve its maximum compaction and strength. Asphalt concrete is used for roads and parking lots. It is frequently used to line fish-rearing ponds and drinking water reservoirs, attesting to its safety in regard to ground water issues.

<u>Aggregate</u> is the crushed rock product that is cemented together with asphalt cement to produce asphalt concrete pavement. Aggregate is designed to various specifications in order for it to produce a pavement that is strong and durable.

<u>Asphalt Cement</u> is a semi-solid thermoplastic, which is black, highly viscous, and extremely stable at ambient temperatures. It does not mix with water, nor does it release oil sheen in water. It is not a listed toxic material nor does it release any toxic substances. It is skid resistant, durable, waterproof, and 100% recyclable. It is transported and stored hot so it will flow and then turns solid as it cools.

Release Agent is a diluted spray that keeps hot-mix asphalt from sticking to the bed of the trucks. It is sprayed in the bed of the trucks just before they are loaded with the hot mix asphalt. It is a biodegradable, water-soluble product available from several different manufacturers.

filling operations are scheduled and supervised to ensure that proper procedures are followed for disconnection and valve closure. The tanks are inspected daily during operations for leaks or other problems.

The Asphalt Handbook, Asphalt Institute, Manual Series No. 4 (MS-4) 1989

#### SPILL PREVENTION AND RESPONSE PROCEDURE

The following Spill Control Plan has been implemented at the site:

#### SPILL PREVENTION

Storage tanks and valves are inspected daily. Filling operations are conducted under the direct supervision of the plant operator or designee. The tanks are properly vented, and the operator ensures that the correct disconnection and valve closure procedures are followed. The storage tanks are aboveground and in full view of the operator.

All valves and operating controls are locked when the plant is not in operation. Routine security inspections are performed when the plant has ceased operations for an extended period.

# SPILL CONTROL

Asphalt cement is stored in double walled above ground storage tanks. A front-end loader is immediately available to construct temporary containment or diversion dikes & berms as required. Spill cleanup materials are kept onsite in the following locations, and are readily available to all personnel:

- Maintenance shop
- Diesel fuel island

#### SPILL RESPONSE PROCEDURES

# IF THERE ARE INJURIES, AN EXPLOSION OR FIRE, CALL 911 IMMEDIATELY.

In the event of a spill or leak, the following actions will be taken, in order:

- 1. Stop the leak. Every effort should be made to stop any leaks, within the bounds of personal safety.
- 2. Warn personnel. Enforce safety and security measures.
- 3. Shut off ignition sources. Motors, electrical circuits, open flames, etc.
- 4. Contain the spill and limit its spread. This can be done through:
  - a. Hasty construction of berms;
  - b. Using sand to barricade around storm drains;
  - c. Covering storm drains with temporary covers;
  - d. Using booms to contain spill on surface waters as appropriate.
- 5. Assess the threat to human health or the environment and the potential for reaching "Waters of the State" (includes surface water, ground water, and sewers). If there is potential to reach these waters, it must be reported. If you are unsure, call Forest Lane (numbers below) for further guidance. Do not ignore the problem.
- 6. Report the spill. If potential for water pollution clearly exists, call:

Oregon Emergency Response System 1-800-452-0311

(from out of state, call (503) 378-6377)

[if spill is in or around Columbia River also call WA Dept of Emergency Management

# INVENTORY OF MATERIALS AND CONTROL

Table 1, lists the materials and activities usually present on-site and associated spill prevention, mitigation, and treatment measures. Liquid asphalt cement is stored onsite in aboveground storage tanks with secondary containment as shown in Table 1.

Table 1. Materials and Activities Inventory

MATERIAL	PURPOSE/LOCATION	AMOUNT STORED	SECONDARY CONTAINMENT	SPILL PREVENTION MEASURES	MITIGATION AND TREATMENT
Aggregate	Raw material. Stockpiles located on the northern portion of site.	Varies	No	Stockpiles cannot be isolated from rainwater.  Stockpiles kept formed and orderly to prevent material migration along roadways.	Runoff is diverted to catch basins to settle out particulates prior to discharge to city sewer.
Asphalt Cement	Raw material. Located at asphalt plant.	Two-17,730 gal tanks (65,460 gal total)	Yes – Double Walled	Trained personnel conduct tank filling operations. Asphalt plant operator observes tank loading.	Spill containment. As spill cools it is self containing <sup>1</sup> .
Biodegradable Asphalt Release Agent	Applied to truck bed prior to asphalt loading. Truck bed release agent at spray rack.	275 gal tote	No	Minimize use through foam application (versus liquid). Use no more than necessary so material remains in truck bed.	Tote is sealed. Any small amount of material that enters the storm water may be captured by the oil/water separator and will biodegrade.
Diesel Fuel	Vehicle fueling. Located southwest of asphalt plant adjacent to NW Front Avenue.	1-15,000 gal 1-12,000 gal	Yes – Double Walled	Use industry BMPs in fuel pumping and filling operations.	Spill containment for tanks. Runoff from fuel filling pad collected in oil/water separator for treatment prior to discharge to city sewer.
Lubricants and Used oil	Vehicle and equipment maintenance. Inside Maintenance shop and storage shed.	~Fifty-55 gal drums (~2750 gal total) 1- (12'x5'x5' rectangular tank with 8 compartments	Yes	Keep storage containers under cover. Use industry BMP for proper handling.	Use oil absorbent materials for small spill deanup.
Lubricants and Motor Oil	Vehicle and equipment maintenance. Outside Maintenance shop.	1- 2,200 gallon (12'x5'x5' rectangular tank with 8 compartments)	Yes	Stored under cover in secondary containment. Use industry BMP for proper handling.	Use oil absorbent materials for small spill deanup.
Solvents	Parts washing. Maintenance shop.	Varies	Yes	Self circulating system inside shop area.	Contained in self circulation system. Filters keep solvent clean for automatic re-use. Material recycled through approved contractor.

If human health or the environment is threatened, notify the following agencies in order (normally done by Environmental Manager, unless they are unavailable)

 EPA National Response Center (Wash. D.C.):
 1-800-424-8802

 EPA Region 10 (Seattle, WA) – 24 Hour Line:
 1-206-442-1263

 DEQ (Portland, OR) – 24 Hour Emergency Line:
 1-800-452-0311

The following needs to be reported:

- Responsible party
- Material released
- Resource damage (i.e. fish)
- Quantity
- Concentration
- Location
- Cleanup status
- 7. **Notify the Environmental Manager** (Forest Lane) and/or the Director of Safety (Mike O'Neil) in order to inform and discuss the extent of spill and its threat to human health or the environment. This may have already been done in step 3 above:

NAME	OFFICE	CELL	НОМЕ
Forest Lane	(425) 313-2656	(425) 864-9410	(206) 243-1328

8. **Begin Cleanup Procedures**. Use sponges or booms as necessary to begin clean up and continue containment efforts. If required, call Hazardous Waste cleanup contractor: see list below:

LOCATION	COMPANY NAME	SPILL NUMBER	SERVICES
Washougal, WA	Phillip Environmental	(800) 547-2436	Spill Response, Vacuum Transport
Portland	Harbor Oil	(503) 285-4648	Spill Response, Vacuum Transport
Portland	Riedel-Smith Environmental	(800) 334-0004	Spill Response, Vacuum Transport, First Responders
Portland	Olympus Environmental	(800) 551-8153	Spill Response, Sorbents, Vacuum Transport
Portland	Spencer Environmental	(800) 733-0896	Spill Response, Sorbents, Vacuum Transport
Portland	S.M.E. Corp	(503) 286-3728	Spill Response,

			Sorbents
Wilsonville	Pegasus Pro Services	(503) 682-5802	Spill Response, Sorbents,
			Vacuum Transport

A copy of this Spill Prevention Control Plan, relevant MSDS sheets for all liquids stored onsite and the applicable phone numbers of managers and emergency services are posted at the plant.

 Document the spill incident by completing an Environmental Incident Report. A copy of the form can be obtained from Environmental. Complete Environmental Incident Report and Fax to Environmental Manager at: (425) 313-2631.

# **PREVENTIVE MAINTENANCE**

The following preventive maintenance (PM) schedule is implemented for storm water facilities located on the asphalt plant site as necessary to ensure effective operation of all storm water best management practices.

FREQUENCY	PM ACTIVITY	RESPONSIBLE OFFICIAL
Monthly	Inspect all chemical storage areas	Site Operator or Designee
Monthly	Inspect storm water control measures, secondary containment, oil water separators, catch basins.	Site Operator or Designee
As needed	Clean, maintain, or repair treatment, containment, and facilities as needed. Perform maintenance activity in a manner to prevent discharge of pollutants.	Site Operator or Designee

# PREVENTIVE MAINTENANCE SCHEDULE: STORM WATER POLLUTION CONTROL SYSTEMS

# APPENDIX A - Storm water PM Schedule

Storm water preventive maintenance (PM) is an extension of regular routine preventive maintenance performed on operating equipment. This PM schedule should be used to monitor systems built to control and minimize storm water pollution. These systems should be inspected to uncover cracks, leaks, and other conditions that could cause breakdowns or failures of storm water mitigation structures and equipment, which, in turn, could result in discharges of chemicals to surface waters either by direct overland flow or through storm drainage systems.

# **DAILY**

- Inspect bag house and ductwork for visible emissions.
  - Replace leaking bags within 24 hours
  - Repair ductwork leaks promptly
- Inspect storage tanks and valves for leaks during operation, repair as necessary.
- Verify chemical/fuel/lubricant/trash/material container bins, buckets, dumpsters, or drums are covered and correctly stored in designated area to prevent exposure of contents to storm water.
- · Keep plant clean and orderly.
- Stop, contain, assess, report, and clean up spills or leaks of chemicals, oil, or lubricants, immediately and as necessary – Follow Spill Prevention and Response Procedures.

# **MONTHLY**

- Inspect chemical/fuel/lubricant storage areas.
  - Clean, maintain, repair as necessary to prevent discharge of chemical/fuel/lubricant to storm water.
  - Check for damaged containers and cracks in containment structure. Fix cracks, leaks, and replace damaged containers as necessary.
- Inspect storm water collection areas.
  - Clean, maintain, repair as necessary to prevent discharge of chemical/fuel/lubricant to facility storm water system
- Inspect storm water conveyance systems.
  - Clean, maintain, repair as necessary to ensure operation as designed

# <u>ANNUALLY</u>

- Inspect bag house with black light.
  - Repair as necessary